either they have eaeh an individual existence, or one is dependent for life upon the other. Both are entitled to baptism. The canon law directs, in the second baptism, the use of the words, "If you be not already baptized, I now baptize you," &c. The right to nourishment and support belongs to all monstrosities as long as they live. To take away the faint expression of life may be a punishable offence, but cannot under any circumstances amount to murder. The right to be considered as belonging to this or to that sex comes into consideration at the period of baptism, education, doubtful paternity, the possibility of marriage. Cases are upon record in which both external and internal organs of generation were wanting. A complete hermaphrodite never existed; but there is often an imperfect condition of the sexual organs which renders the question difficult of decision. The Prussian law gives to the parents the right of determining the point as regards education; but after the age of eighteen the individual may form a separate conclusion.—*Med. Times and Gaz.* May 27, 1854, from *Henke's Zeitschrift*, xxxiv. 1, 1854.

MISCELLANEOUS.

64. *Meteorological Changes in relation to Epidemic Diseases.*—Dr. Richardson read before the Epidemiological Society (March 6, 1854) a paper written by himself and Dr. Moffatt on this subject. The authors opened the subject by referring to the labours of Hippocrates, Sydenham, Arbuthnot, and some other writers, and then passed on to consider, 1st. The general influence of the seasons; and, 2d. The connection that exists between epidemical diseases, and the following meteorological conditions—temperature, humidity of the atmosphere, electric conditions of the atmosphere, the force and directions of the wind, and the presence of agents supposed to be foreign to the atmosphere.

As the result of their labours, the authors have arrived at the following conclusions:—

1. That all those diseases which prevail at certain periods in a marked degree, and at other periods are as markedly absent, should be called epidemical; or, in other words, that the idea of the communicability of a disease should not alone and solely carry with it the idea of an epidemic disease.

2. That the influence of the seasons on all the epidemic diseases is so marked, that a series of laws bearing on this subject might easily be wrought out from observations sufficiently correct and extensive.

3. That, according to the observations of Dr. Moffat, the maximum of all diseases takes place when the wind is in the South, or equatorial, or ozone, points of the compass; and the minimum, when it is in the North, or polar points, or points where ozone is absent.

4. That the maximum of diseases for individual points of the compass occurs at N. W. and S. E.

5. That some diseases are almost peculiar to certain points of the compass.

6. That temperature does not seem to exert so much direct influence over diseases, as do the changes indicated by the oscillations of the barometer.

7. That ozone presents itself at certain periods, and, as it would seem, under the influence of particular laws; that certain diseases are peculiar to ozone periods, but that it need not be inferred that ozone gives rise, *per se*, to those diseases.

8. That the greatest number of diseases (according to Dr. Moffat's observations) take place with a medium degree of humidity of the atmosphere; and the greatest number of deaths with a minimum degree of humidity.

9. That the force of the horizontal movement of the wind would seem, from Mr. Richardson's present observations, to exert no influence on the spread of disease.

10. That, in order to arrive at precise results as to the effects of meteorological changes on epidemic diseases, observations both of meteorological pheno-

mena and of diseases ought to be steadily conducted at various points of the country, including areas of not more than twenty miles; and that the daily results thus obtained should be forwarded for arrangement to a public officer resident in London—a Registrar-General of Medico-Meteorological Observations.

Dr. Sibson said that there was one point in which he felt induced to differ from the conclusions arrived at by the authors of the interesting paper which had just been read, viz—as to the influence of temperature. The Registrar-General's Reports showed that this had more influence on mortality than all other meteorological changes put together. To take a single example; in the last week of 1853, the temperature was considerably below the average, and the deaths were 1,400; in the corresponding week of 1852, the temperature was eight or nine degrees above the average, and the deaths were only 900. The mortality was at its minimum, with a temperature of about 53° Fahr. It was lower when this average was reached during the spring months than during the autumn. He believed that, in fact, the laws of mortality would be found to hinge on the differences of temperature, which were themselves closely connected with changes in the winds. It must not be forgotten, however, in reading the Reports of the Registrar-General, that they refer only to *deaths* from disease, and do not give us any information with respect to the prevalence of the diseases themselves. In connection with meteorological observations, it was important to have accurate information concerning the position and physical geography of the places where the observations were taken. The character of the winds, for example, was much influenced by the position of the station where they were observed with respect to the coast. It would also be interesting to know the number of days in which each wind was observed. From some observations by the Astronomer-Royal, Professor Airey, it appeared that westerly and southwesterly winds were the commonest in this country, while those during the prevalence of which the mortality was apparently higher—viz., northwest and southeast—were much less common. This would make it more difficult to obtain correct averages. Probably, however, a different series of winds was prevalent in that part of the kingdom where the observations had been made on which this paper was founded; and, indeed, on referring to the table of the number of days on which each wind was noticed, he found that the northwest winds were commonest, then S. W., S., and S. E.

Dr. Snow said that during the last few months southeast and northwest winds had been very prevalent. He saw nothing in this paper contradictory to the reports of the Registrar-General; it was well known that the number of deaths from a disease was not regulated by the mere numerical prevalence of that disease; and that the same weather which was bracing and congenial to the young and robust was fatal to the old and infirm.

Dr. Gavin Milroy observed that from these tables, it was very evident that the diseases most affected by changes in the seasons were cholera, diarrhœa, and dysentery, which were all much more prevalent in the autumn; the same was true of yellow fever in the West Indies and at Gibraltar. It had been observed in Jamaica, and, indeed, over the whole world, that before the outbreak of cholera, the atmosphere had been remarkably stagnant, and when winds did at length come, they blew from unusual quarters; the rains, too, had been heavier than in ordinary years.

Mr. Richardson said that it was not intended to deny the great indirect influence of change of temperature with which many other meteorological changes were intimately connected. A very full account of the geology of the district where the observations had been made was given by Dr. Moffat in the *Athenæum*, during the course of last year.—*Med. Times & Gaz.* March 18, 1854.